

10/581911

AP3 Rec'd PCT/PTO 07 JUN 2006

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q95279

Naoka KIDA, et al.

Appln. No.: Unknown

Confirmation No.: Unknown

Group Art Unit: Unknown

Filed: June 7, 2006

Examiner: Unknown

For: METHOD FOR THREE-DIMENSIONAL CARTILAGE TISSUE ENGINEERING
USING BONE MARROW CELLS IN TISSUE ENGINEERING BONE MARROW
CELLS IN SIMULATED MICROGRAVITY ENVIRONMENT

INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. §§ 1.97 and 1.98

MAIL STOP AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

1. Japanese Patent Application No. 2001-512304 A, published August 21, 2001.
2. S. Marlovits et al., "Tissue Engineering of Human Articular Cartilage in Rotating-Wall Vessels", International Journal of Artificial Organs, 2002, Vol. 25, No. 7, pp. 676.
3. S. Marlovits et al., "Three-dimensional culture of human articular chondrocytes in rotating-wall vessels, FASEB Journal, 1999, Vol. 13, No. 4, Part 1, pp. A427.

Naoko KIDA et al.

Q95279

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4. T.L. Prewett et al., "Three-Dimensional Culture of Bovine Chondrocytes in Rotating-Wall Vessels", In Vitro Cellular and Developmental Biology Animal, 1994, Vol. 30A, No. 3, Part 2, pp. 109.
5. L.E. Freed et al., "Microgravity Tissue Engineering", In Vitro Cellular and Developmental Biology Animal, 1994, Vol. 33, No. 5, pp. 381--385.
6. Japanese Patent Application No.2003-9852 A, published January 14, 2003.
7. Y. Oyabu et al., "Three-dimensional engineering of cartilage tissue using RWV bioreactor", Japan Science and Technology Agency, The Annual Symposium for 2003, December 3, 2003, pp. 160.
8. N. Kida et al., "Cartilage tissue regeneration using RWV bioreactor system", December 16, 2003, pp. 271.
9. H. Holtzer et al., "The Loss of Phenotypic Traits by Differentiated Cells in Vitro, I., Dedifferentiation of Cartilage Cells", Proceedings of the National Academy of Sciences, November 16, 1960, pp. 1533-1543.
10. S. Saitoh et al., "Compressive Force Promotes Chondrogenic Differentiation and Hypertrophy in Midpalatal Suture Cartilage in Growing Rats", The Anatomical Record, 2000, pp. 392-401.
11. S. Mizuno et al., "Hydrostatic Fluid Pressure Enhance Matrix Synthesis and Accumulation by Bovine Chondrocytes in Three-Dimensional Culture", Journal of Cellular Physiology, 2002, pp. 319-327.

One copy of each of the listed documents is submitted herewith.

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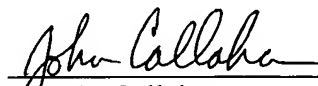
The present Information Disclosure Statement is being filed: (1) No later than three months from the application's filing date; (2) Before the mailing date of the first Office Action on the merits (whichever is later); or (3) Before the mailing date of the first Office Action after filing a request for continued examination (RCE) under § 1.114, and therefore, no Statement under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

Applicant encloses herewith a copy of a International Search Report dated February 7, 2005, which citing such documents and indicating the degree of relevance found by the foreign patent office. Documents 1-6 are listed on the International Search Report.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: June 7, 2006

Substitute for Form 1449 A & B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>			Complete if Known		
			Application Number	Unknown	
			Confirmation Number	Unknown	
			Filing Date	June 7, 2006	
			First Named Inventor	Naoka KIDA	
			Art Unit	Unknown	
			Examiner Name	Unknown	
			Attorney Docket Number	Q95279	
Sheet	1	of	1		

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number	Kind Code ² (if known)		
		US			
		US			

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Tranlation ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)			
		JP	2001-512304	A	08/21/2001		
		JP	2003-9852	A	01/14/2003	Mitsubishi Heavy Ind Ltd and Yuge Rui	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation ⁶
		S. Marlovits et al., "Tissue Engineering of Human Articular Cartilage in Rotating-Wall Vessels", International Journal of Artificial Organs, 2002, Vol. 25, No. 7, pp. 676.	
		S. Marlovits et al., "Three-dimensional culture of human articular chondrocytes in rotating-wall vessels, FASEB Journal, 1999, Vol. 13, No. 4, Part 1, pp. A427.	
		T.L. Prewett et al., "Three-Dimensional Culture of Bovine Chondrocytes in Rotating-Wall Vessels", In Vitro Cellular and Developmental Biology Animal, 1994, Vol. 30A, No. 3, Part 2, pp. 109.	
		L.E. Freed et al., "Microgravity Tissue Engineering", In Vitro Cellular and Developmental Biology Animal, 1994, Vol. 33, No. 5, pp. 381-385.	
		Y. Oyabu et al., "Three-dimensional engineering of cartilage tissue using RWV bioreactor", Japan Science and Technology Agency, The Annual Symposium for 2003, December 3, 2003, pp. 160.	
		N. Kida et al., "Cartilage tissue regeneration using RWV bioreactor system", December 16, 2003, pp. 271.	
		H. Holtzer et al., "The Loss of Phenotypic Traits by Differentiated Cells in Vitro, I., Dedifferentiation of Cartilage Cells", Proceedings of the National Academy of Sciences, November 16, 1960, pp. 1533-1543.	
		S. Saitoh et al., "Compressive Force Promotes Chondrogenic Differentiation and Hypertrophy in Midpalatal Suture Cartilage in Growing Rats", The Anatomical Record, 2000, pp. 392-401.	
		S. Mizuno et al., Hydrorstatic Fluid Pressure Enhance Matrix Synthesis and Accumulation by Bovine Chondrocytes in Three-Dimensional Culture", Journal of Cellular Physiology, 2002, pp. 319-327.	

Examiner Signature	Date Considered
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to indicate here if English language Translation is attached.